



Angus Advisor

► DECEMBER herd management tips

Southern Great Plains

by **David Lalman**, Oklahoma State University, dlalman@okstate.edu

Spring-calving herds

- If not done in November, create a contemporary group (sort and manage separately) of 2-year-old cows and, if necessary, 3-year-olds and old cows that you intend to retain. This contemporary group can then be provided access to higher-quality stockpiled pasture, fed better-quality hay, fed more supplement or provided access to small-grains forage as a supplement.
- The nutritional goal for this contemporary group should be to obtain a BCS at calving that is similar to that of the remaining cow herd. Most purebred breeders do not separate thin cows (of varying ages) from the herd because this makes genetic evaluation difficult.
- Bred heifers should have a minimum BCS of 6 by this time of year. If not, an immediate intervention strategy is necessary to achieve positive condition gain (not just weight gain due to fetal growth) before calving.
- December and early January are excellent times to check weights by weighing a portion, if not all, of the virgin replacement heifers. Using this information and the targeted breeding weight and rate of weight gain established at weaning, producers can evaluate the nutritional strategy and make necessary adjustments.

Fall-calving herds

- December is the heart of the breeding season for many fall-calving herds in the Southern Great Plains. Consequently, the goal of the nutritional program is to minimize weight and condition loss of cows that are nursing 30- to 100-day-old calves. To achieve this, 5-8 lb. of a concentrate supplement, along with 5-10 lb. of high-quality legume hay or silage may be necessary.
- In this region, limited access to small-grains pasture is an excellent and cost-effective supplementation program for fall-calving cows.
 - For a lactating cow, access to small-grains pasture should be limited to about 25%-33% of daylight hours. A fill-up period is about four to six hours, so one

way to achieve 25% grazing time is to turn cows out on the small-grains pasture for a half day every other day. Another strategy is to turn cows out on small-grains pasture for one full day, followed by two full days of grazing low-quality forage or hay. This approach should approximate 33% of grazing time on small-grains pasture. Modify access time according to the cows' condition, forage availability and other factors.

- Some breeders choose to graze purebred cows on small-grains pasture fulltime for the purpose of maximizing genetic potential for milk production and weight gain of calves.
- A high-calcium (Ca), high-magnesium (Mg) mineral supplement should be provided to lactating cows grazing small-grains forage.
- December is a good time to implement a creep-feeding or creep-grazing program. Many producers seem to have the impression that creep-feeding somehow reduces nutritional stress on lactating cows. It does not. Study after study demonstrates that cows produce and calves consume the same amount of milk when calves are being creep-fed, compared to calves receiving no supplemental feed.
- Creep feed does, however, replace (or reduce) forage intake when more than about 3 lb. of creep feed is consumed. Creep-feeding programs are more efficient when forage is short and/or forage is low in nutritional value (like during December) compared to times when forage is abundant and has high nutritional value. Remember to report creep-fed calves as a separate contemporary group.

General recommendations

- Cattle afflicted with fescue foot should be removed from fescue pastures and fed different forage until they have recovered.
- Begin grazing dormant weeping lovegrass pastures. Be aware that this cured forage resource is notoriously low in protein and digestibility, ranking somewhere between low-quality prairie hay and wheat straw.
- Native hay meadows can be lightly grazed after a hard frost. Leave a minimum of about 6 in. of forage regrowth and remove cattle if wet conditions develop.
- Before the end of the year, check your

financial management plan and projected tax situation in case income or expense adjustments are necessary to minimize your tax burden. Numerous financial tools are available at the OSU Agricultural Economics web site at <http://agecon.okstate.edu/extension.asp>.

Midwest Region

by **Twig Marston**, University of Nebraska, tmarston2@unl.edu

Spring-calving cows

- Supplemental feeding can be needed in some operations. Supplementation programs are dependent on the cow's stage of production, BCS, forage quality, and forage availability. An 1,100-lb. dry cow grazing a low-quality forage (such as dormant native range grass) might need:
 - Dry grass — 1-2 lb. per day of a 40% CP supplement; or
 - Dry grass — 3-4 lb. per day of a 20% CP supplement; or
 - Dry grass — 5 lb. legume hay.
- Low-quality forages are generally deficient in rumen degradable protein, trace minerals and vitamin A. Therefore, they should be the first nutrients considered when developing supplementation programs.
- Compare and buy supplements based on cost per pound of nutrient.
- Utilize crop residues. Corn and grain sorghum stalks have historically been the most economical forage system for wintering spring-calving cows.
- Use proper grazing techniques to improve system efficiency.
- Cows in average body condition can be grazed at 1-2 acres per cow for 30 days, assuming normal weather.
- Available forage is directly related to grain production levels. Approximately 50 lb. of crop residue is on the field per bushel of corn harvested.
- If fields have more than 5 bu. of downed corn per acre, restrict and adjust grazing patterns to avoid rumen acidosis and/or laminitis.
- Control lice.
- Retained-ownership calves should be fed least-cost rations to maximize profit potential. Research indicates growing calves at rates greater than 2 lb. daily can have carcass quality advantages.

General management

- ▶ Document your cost of production by participating in Standardized Performance Analysis (SPA) programs.
- ▶ Review management decisions; lower your costs per unit of production.
- ▶ Check your financial management plan and make appropriate adjustments before the end of the year.

Western Region

by **Randy Perry**, University of California, Fresno, randyp@ucfresno.edu

Fall-calving herds

The main focus is the breeding season.

Sire selection. Assuming that AI is being used, sires should have been previously selected, semen ordered and delivered.

Semen. Be sure that semen is handled properly. This is one of the small details that is often overlooked and can be the difference between a good and an outstanding AI program.

Synchronization protocol. The synchronization protocol should have been selected and products should already be on hand. Implement the protocol and take extra time in administering synchronization products, being sure to prevent injection-site leakage.

Heat detection. The importance of heat detection cannot be overemphasized. It is critical in determining the success of an AI program.

AI breeding. Take the time and be precise with all of the details concerning semen handling and placement. If you are breeding AI for more than one cycle, inject GnRH at the time of insemination on repeat inseminations.

Natural-service bulls. Bulls should have been semen-checked and trichomoniasis-tested and ready for use from a physical standpoint. In addition, they should be in the proper degree of body condition and should have been vaccinated at least one month prior to turnout.

Mineral supplementation. Minerals should be supplemented on a year-round basis, and the breeding season is the most critical time in terms of meeting mineral requirements.

Protein and energy supplementation. It is critical that both protein and energy requirements of cows are being met during the breeding season. Cows should be in a state of positive energy balance, or gaining weight, during the entire length of the breeding season as energy balance has a significant influence on fertility.

Vaccinations. Cows should have been vaccinated 30 days prior to the start of the breeding period.

Treatment protocol. As discussed last

month, treatment protocols should be on hand for both scours and pneumonia in suckling calves and both should include first and second treatment options.

Spring-calving herds

The main focus is preparing for the calving season.

Sire selection. Although the start of the breeding period is still months away, a list of potential AI sires should be developed.

Vaccinations. If any precalving vaccinations, such as a scour vaccine, are going to be administered, they should be given far enough in advance of the calving season to avoid handling cows that are close to parturition.

Calving supplies and equipment. Be sure that equipment is in working order and supplies are on hand to assist females once calving starts.

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area.

Body condition. The target level of body condition at calving is a minimum BCS of 5 for mature cows and 6 for 2-year-old heifers on a scale of 1 to 9.

Protein and energy supplementation. Both protein and energy requirements need to be met in order to achieve the desired level of body condition as described in the previous paragraph.

Heifer and bull development. As discussed last month, the developmental period from weaning until yearling time is critical in terms of influencing the future productivity of both bulls and heifers. Both sexes need to be developed at adequate rates so that differences in terms of genetic potential for growth can be exhibited. However, neither sex should be developed at extremely high rates as excessive fat deposition can hinder future reproductive performance and detrimentally affect foot and leg soundness. Heifers should be developed at a rate that allows them to achieve a target weight of approximately 65% of their projected mature weight at the start of the breeding period.

Heifers and bulls. Normally the first month following weaning is the most challenging in terms of respiratory disease in calves. That point should have passed by now. If calves are going to be PI-BVD tested or vaccinated for anaplasmosis using the one-shot live vaccine, this is a good time to get those samples collected and vaccinations administered.

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves. Have first and second treatment options for both conditions, and be sure that the

protocols have been communicated to the appropriate personnel.

Southeastern Region

by **Jane Parish**, Mississippi State University, jparish@ads.msstate.edu

General recommendations

Vitamin A in winter diets. Of all the vitamins required in beef cattle diets, vitamin A is the vitamin of most practical importance in beef cattle production. It is essential for normal growth and development, tissue maintenance and bone development.

Vitamin A supplementation is often necessary during winter because a deficiency is most likely to occur when cattle are fed sun-bleached pasture or hay grown during drought conditions. Vitamin A deficiency is also more common when cattle are fed high-concentrate diets, feeds that have been exposed to sunlight and high temperatures, feeds that have been heavily processed, or feeds that have been stored for extended periods of time. Calves deprived of colostrum and cattle undergoing nutritional or environmental stress are more susceptible to vitamin A deficiency.

Signs of vitamin A deficiency include reduced feed intake, rough hair coat, joint and brisket swelling, tearing of the eyes, night blindness, slow growth, diarrhea, convulsive seizures, blindness, improper bone growth, low conception rates, abortion, stillbirths, blind calves, semen abnormalities, and various infections. Vitamin A deficiencies can be corrected by providing lots of fresh, leafy, high-quality forage or supplemental vitamin A in feed or through injections. Pregnant beef heifers and cows require 1,270 IU per lb. of dry feed, while lactating cows and breeding bulls require 1,769 IU per lb. of dry feed of vitamin A. Reasonable rates of vitamin A supplementation are between 100,000 to 200,000 IU per lb. mineral supplement per day for a 4-oz. intake of mineral or 200,000 to 400,000 IU per lb. mineral supplement per day for a 2-oz. mineral intake.

Nutritional management. Manage winter nutrition closely to achieve performance and cost efficiency.

Manage winter annual pastures to maintain at least 4 in. of stubble height. Limit-grazing for a few hours per day is a good way to efficiently utilize winter forages and can provide acceptable protein supplementation to residual summer forages. Overgrazing can reduce winter forage availability over the grazing season and should be avoided. Stockers, heifers and fall cow-calf pairs may be good groups to utilize annual ryegrass and other lush winter grazing.

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There is still time to test the quality of stored forages, if not already done, and order winter supplements at fall prices in some cases. Review forage test results, inventory hay supplies and determine if additional hay is needed.

Be ready to handle severe weather conditions. Cattle energy requirements increase as the temperature drops below 15°F. Keep proper free-choice minerals and clean water available for cattle at all times,

checking these supplies often. Provide high-magnesium mineral supplementation to cows on lush winter grazing, and watch for signs of grass tetany. Plan a labor schedule in advance for the holidays.

Marketing and financial management.

Develop a plan for managing credit needs for the operation. Financial market uncertainty and increasing credit restrictions should be assessed as part of this plan.

Spring-calving herds

Calving management. Start ordering calving supplies now so that they will be on hand in time for calving. These supplies

may include calving recordbooks, ear tags, obstetric equipment, disinfectants and colostrum. Check bred heifers frequently. Calving may begin in December in many herds if bred ahead of the mature cow herd. Check breeding records for expected calving dates, and observe cattle closely as calving approaches.

Breeding herd nutritional management.

Nutritional requirements increase about 10%-15% in the last 30-45 days prior to calving. Maintain a good nutritional program targeting a BCS of 5 at calving for cows and 6 at calving for heifers. Do not underfeed in an attempt to reduce

calf birth weight. Continue developing replacement heifers to reach two-thirds of mature weight by breeding time.

Monitor body condition closely for the entire herd, and supplement thin cows and heifers as needed. Feed lower-quality hay to nonlactating, pregnant cows, saving the best hay for calving season. Implement a nutritional program to get thin cows in proper body condition before next calving. It may also be beneficial to add weight and condition to cows identified as culls before marketing them. Develop plans for marketing cows based on market conditions and cow body condition. This time of year is

often an ideal time to market cows and bulls. Manage market cows in keeping with BQA guidelines.

Fall-calving herds

Breeding herd management.

Prebreeding vaccinations should be completed, breeding supplies, semen and herd sires should be on hand now. Breeding is already under way in some herds and begins this month in other herds. Begin breeding heifers three to four weeks before the mature cow herd. Continue to monitor heifer development by checking weights and adjusting nutrition to meet breeding targets.

They should reach target breeding weights and be on an increasing plane of nutrition at breeding.

Herd sires should start the breeding season in good condition, BCS 6. Implement the breeding program by turning out bulls that complement herd females and marketing objectives and have passed a breeding soundness examination. Watch the breeding herd for returns to heat, and rotate herd sires if needed. Keep accurate breeding records for ET, AI and natural-service programs.

